

AMENDED IN ASSEMBLY AUGUST 8, 2008

AMENDED IN ASSEMBLY JUNE 16, 2008

AMENDED IN SENATE APRIL 10, 2008

AMENDED IN SENATE APRIL 1, 2008

SENATE BILL

No. 1174

Introduced by Senator Lowenthal

February 8, 2008

An act to add and repeal Section 25227 of the Public Resources Code, relating to vehicles.

LEGISLATIVE COUNSEL'S DIGEST

SB 1174, as amended, Lowenthal. Vehicles: hybrid and electric vehicles: visually impaired pedestrians.

Existing law requires a vehicle to be equipped with certain specific equipment to ensure the safe operation of the vehicle.

This bill would require the State Energy Resources Conservation and Development Commission to convene a Quiet Motorized Road Vehicle and Safe Mobility Committee comprised of representatives from specified entities to research, identify, and make recommendations to the commission on strategies to ensure that all motorized road vehicles, regardless of engine type or configuration, emit sound sufficient to be heard and localized by pedestrians who are blind or visually impaired. The bill *would* require the committee to conduct the research in a specified manner, including first conducting laboratory research to determine the intensity and spectral characteristics of vehicular sounds, comparing the intensity and spectral characteristics of noise emissions of different types of relatively quiet vehicles and the requirements of blind and visually impaired pedestrians, conducting a synthesis and

review of vehicle detection technologies, conducting focus group research, developing prototype vehicular sensing systems, and evaluating these systems.

The commission, on or before January 1, 2010, would be required to submit a report to the Legislature on the recommendations from the committee. The commission would be required to implement these requirements using moneys from non-General Fund revenue sources, *but would be prohibited from using moneys from the Public Interest Research, Development, and Demonstration Fund*. The bill would be repealed by its own terms on January 1, 2011.

Vote: majority. Appropriation: no. Fiscal committee: yes.
State-mandated local program: no.

The people of the State of California do enact as follows:

1 SECTION 1. The Legislature finds and declares all of the
2 following:

3 (a) Technological advances in motor vehicle fuel efficiency
4 have led to the increased popularity of alternative fuel motorized
5 road vehicles, such as hybrid and electric vehicles, and quiet
6 roadway and tire technologies. These new technologies are
7 changing the way pedestrians, especially the blind and visually
8 impaired, utilize audible cues to cross streets and move through
9 traffic. The engines in these vehicles operate with significantly
10 less sound than the traditional combustion engine, resulting in a
11 reduction of the warning time that blind or visually impaired
12 pedestrians have to get across an intersection. This is a threat to
13 the ability of the blind or visually impaired pedestrians to move
14 with independence and safety.

15 (b) When vision, as a means of understanding and interpreting
16 the environment, is reduced or completely eliminated, hearing
17 takes over as the main information channel. Those who are blind
18 or visually impaired have learned to rely on hearing to judge when
19 it is safe to cross the street. Hearing also helps them verify that
20 they are within a crosswalk, following a straight pathway, and not
21 veering into a parking lot or other hazardous vehicular areas.

22 (c) Traffic is a primary source of auditory information. The
23 sounds of traffic give the blind or visually impaired pedestrians
24 information about location, direction, and flow which enables them
25 to determine when they can safely cross a street. These sounds

1 allow the blind or visually impaired pedestrians to determine the
2 geometric shape of an intersection and the presence of approaching
3 vehicles. When there is silence, it is interpreted as a quiet time to
4 safely cross an intersection.

5 (d) Anecdotal reports of pedestrians who are blind or visually
6 impaired indicate that these environmentally friendly vehicles are
7 extremely difficult and often impossible to hear.

8 SEC. 2. Section 25227 is added to the Public Resources Code,
9 to read:

10 25227. (a) The commission shall convene a Quiet Motorized
11 Road Vehicle and Safe Mobility Committee comprised of
12 representatives from vehicle manufacturers, the blind or visually
13 impaired pedestrian community, insurance industry, vehicle
14 research entities, and law enforcement organizations, including,
15 but not limited to, the Department of the California Highway Patrol.
16 The committee shall research, identify, and make recommendations
17 to the commission on strategies to ensure that all motorized road
18 vehicles, regardless of engine type or configuration, emit sound
19 sufficient to be heard and localized by pedestrians who are blind
20 or visually impaired.

21 (b) The committee shall conduct the research required by
22 subdivision (a) in the following order of priority:

23 (1) Laboratory research to determine the intensity and spectral
24 characteristics of vehicular sounds that are required for blind or
25 visually impaired pedestrians to take both of the following actions:

26 (A) Accurately align with vehicles.

27 (B) Accurately judge the speed and distance of approaching
28 vehicles.

29 (2) A comparison of the intensity and spectral characteristics
30 of noise emissions of different types of relatively quiet motorized
31 road vehicles traveling at different speeds over different surfaces
32 in wet and dry conditions.

33 (3) A comparison of the requirements of blind or visually
34 impaired pedestrians with the visual impairments identified
35 pursuant to paragraph (1).

36 (4) A synthesis of vehicle detection technologies that have been
37 developed for speed detection or vehicular collision avoidance,
38 and a review of these technologies to determine their feasibility
39 for development as vehicular sensing systems for blind or visually
40 impaired pedestrians.

1 (5) Focus group research to determine the characteristics of a
2 vehicular sensing system that are necessary from the perspective
3 of blind or visually impaired pedestrians.

4 (6) Technological development of prototype vehicular sensing
5 systems for use by blind or visually impaired pedestrians.

6 (7) An evaluation of the usefulness of the technologies
7 developed pursuant to paragraph (6) by persons with visual
8 impairments.

9 (c) Based on the research conducted pursuant to subdivision
10 (b), the commission's recommendations shall include, but not be
11 limited to, proposed legislation and regulations, needed research
12 or technology, and funding options for implementing the
13 recommendations.

14 (d) On or before January 1, 2010, the commission shall submit
15 a report to the Legislature on the recommendations of the Quiet
16 Motorized Road Vehicle and Safe Mobility Committee.

17 (e) The commission shall implement the requirements of this
18 section using moneys from non-General Fund revenue sources,
19 *but shall not use moneys from the Public Interest Research,*
20 *Development, and Demonstration Fund.*

21 (f) This section shall remain in effect only until January 1, 2011,
22 and as of that date is repealed, unless a later enacted statute, that
23 is enacted before January 1, 2011, deletes or extends that date.